**1.4**

**Solving Equations Quadratic in Form**

**Example**

Find the real solutions of the equation: 

Remember a quadratic equation is of the form: 

Using substitution for the first equation we can make it a quadratic equation. Let’s let and then use substitution to rewrite the equation.

Substituting, into , gives: .

, this is something that is familiar. We can solve this by factoring.



We need to solve for ***x***, so now we use substitution again to find the solutions to .

, therefore  and . has no real solution.  , has the solution .

Try these (the key here is finding the correct substitution value or expression):

1. 
2. 
3. 